**Naval Education and** 

**Training Command** 



# **Construction Electrician Basic**

Only one answer sheet is included in the NRTC. Reproduce the required number of sheets you need or get answer sheets from your ESO or designated officer.

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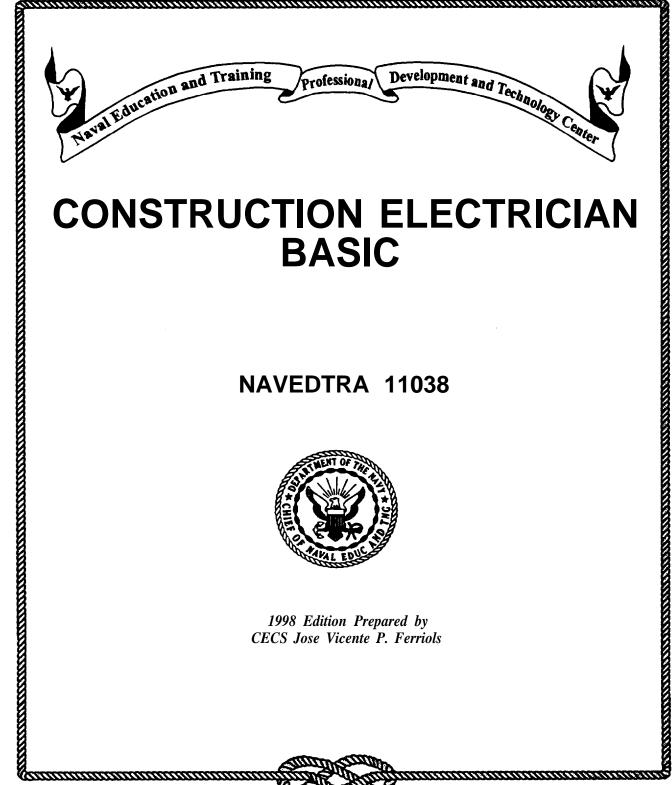
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Although the words "he," "him," and "his" are used sparingly in this manual to enhance communication, they are not intended to be gender driven nor to affront or discriminate against anyone reading this text.

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## **CONSTRUCTION ELECTRICIAN BASIC**

NAVEDTRA 11038



1998 Edition Prepared by CECS Jose Vicente P. Ferriols



#### **PREFACE**

This training Manual (TRAMAN) and its associated nonresident training course (NRTC), (included in the back of this TRAMAN), form a self-study package that will enable Construction Electricians to fulfill the requirements of their rating. Among these requirements are knowledge of construction support activities, the ability to read drawings and specifications, and the ability to perform tasks involved with power generation and distribution, interior wiring, communications and lighting, and electrical appliances, test equipment, motors, and generators.

Designed for individual study and not formal classroom instruction, this TRAMAN provides subject matter that relates directly to the occupational standards of the Construction Electrician rating. The NRTC provides a way of satisfying the requirements for completing the TRAMAN. Assignments in the NRTC contain supporting questions designed to lead the student through the TRAMAN.

This TRAMAN was prepared by the Naval Education and Training Professional Development and Technology Center (formerly Naval Education and Training Program Management Support Activity), Pensacola, Florida, for the Chief of Naval Education and Training. Technical assistance was provided by the Naval Facilities Engineering Command, Alexandria, Virginia; the Naval Construction Training Center, Gulfport, Mississippi; and the Naval Occupational Safety, Health, Environmental Training Center, Norfolk, Virginia.

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#### THE UNITED STATES NAVY

#### **GUARDIAN OF OUR COUNTRY**

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends; the United States Navy exists to make it so.

#### WE SERVE WITH HONOR

Tradition, valor, and victory are the Navy's heritage from the past. To these may be added dedication, discipline, and vigilance as the watchwords of the present and the future.

At home or on distant stations as we serve with pride, confident in the respect of our country, our shipmates, and our families.

Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

#### THE FUTURE OF THE NAVY

The Navy will always employ new weapons, new techniques, and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war.

Mobility, surprise, dispersal, and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past.

Never have our opportunities and our responsibilities been greater.

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# SUMMARY OF THE CONSTRUCTION ELECTRICIAN TRAINING SERIES

#### CONSTRUCTION ELECTRICIAN BASIC

This training manual (TRAMAN) replaces *Construction Electrician 3* and should be studied by those seeking advancement to Construction Electrician Third Class.

#### CONSTRUCTION ELECTRICIAN INTERMEDIATE

This TRAMAN, when published (refer to NAVEDTRA 12061 for availability), will replace *Construction Electrician 3 & 2* and should be studied by those seeking advancement to Construction Electrician Second Class. Topics in this book will be a continuation of information covered in the *Construction Electrician Basic* TRAMAN.

#### CONSTRUCTION ELECTRICIAN ADVANCED

This TRAMAN, when published (refer to NAVEDTRA 12061 for availability), will replace *Construction Electrician 1* and should be studied by those seeking advancement to Construction Electrician First Class. Topics in this book will be a continuation of information covered in the *Construction Electrician Intermediate* TRAMAN.